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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
NATIVIDAD, PHILIP SANA

ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/015,151	Applicant(s) HEDIN, GUNNAR
	Examiner Phil Natividad	Art Unit 2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-29 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13, there is a lack of antecedent basis for "non-parallel etalon", making it indefinite as to the metes and bounds of applicant's desired limitations. In addition to another analogous lack of antecedent basis in claim 17, claim 17 appears to be only a sentence fragment.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 19, 20, and 28-29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ackerman et al. (6,186,937). Note means for illuminating/producing (200), means for detecting at least three different portions (120), means for generating a feedback signal (420), and means for adjusting in response to feedback (400). As to claim 20, note col. 6 lines 1-22.

5. Claims 2-6, 9-10, 22, and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ackerman et al. Ackerman discloses applicant's invention as applied to claim 1 above. As to

claims 2 and 25: "reflecting", note that FP etalons inherently operate by reflecting rays between front and back surfaces of the etalon; as to "at least three different portions", note Fig. 3 and col. 5 lines 55-59, for any of the illustrated spectra. As to claims 3 and 22, see Fig.2 and col. 5 lines 30-35. As to claims 4-5 and 26, regular spacing (e.g. as disclosed Fig. 1) of the at least three detector elements can inherently satisfy applicant's algebraic expression as recited. As to claim 6, Ackerman expressly discloses regular spacing over one period (col. 5 lines 45+), and it would have been obvious to one of ordinary skill to maintain regular spacing for such additional (plurality of) detectors which could extend to an integral number of periods, for a motivation of maintaining regularity of input data points. As to claims 9-10, note col. 6 lines 1-21.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 7, 8, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackerman et al. As applied above, Ackerman discloses applicant's method of using at least three detection signals, except without expressly disclosing summing at least three detector signals. However, at col. 5 lines 54-56, Ackerman teaches that more than one of the plurality of detectors may advantageously detect a useful part 248 of one of a spectra. Given that Ackerman's next paragraph teaches the applicability of power level sensing, it would have been obvious to one of ordinary skill to sum all detectors for measuring power of one of a spectra, for motivation of obtaining a power measurement using Ackerman's discriminator system (100).

8. Claims 11-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Ackerman et al. As to claim 11, as applied to claim 10 and claim 1 above, Ackerman discloses applicant's invention, except without expressly disclosing summing three power signals and dividing by three (averaging). However, it would have been notoriously obvious to one of ordinary skill in the art to perform summing (as applied to claim 7 above) or averaging power levels across multiple detectors, for motivation of providing more consistent data.

Further as to claims 12-16, the notoriously well-known trigonometric manipulations of detector signals would have been obvious to one of ordinary skill in the art, since the e.g. three detector signals are known to be phase-delayed readings of the same "useful part 248" (Ackerman col. 5 lines 56-57) of the periodically repeating function.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackerman et al. Ackerman discloses applicant's invention, as applied to claim 1 above, except without expressly disclosing ITU wavelengths. However, since Ackerman's teachings are in light of advantageous uses in WDM optical communications (col. 1 lines 27-28), it would have been obvious to one of ordinary skill in the art to optimize Ackerman for use with specific (e.g. ITU) wavelengths, for motivation of use in improving specific optical communications systems.

Double Patenting

10. Claims 1, 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 26, 34 of copending Application No. 10/014,278. Claims 20, 29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-21

of Application No. 10/014,278. Although the conflicting claims are not identical, they are not patentably distinct from each other because the devices claimed in the copending application inherently practice the methods claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 21, 23, 24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 09/871,230 in view of Ackerman et al. As applied to instant independent claim 20, Ackerman teaches applicant's method, except without expressly disclosing further embodiments of (non-parallel) etalons, but when combined with teachings of 09/871,230 of non-parallel etalons, it would have been obvious to one of ordinary skill to obtain the teachings of claims 21, 23, 24 for motivation of e.g. determining/obtaining a desired phase characteristic of an etalon (Ackerman col. 1-2).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner can be directed to Phil Natividad whose telephone number is 703-306-5944. The examiner can normally be reached on Tuesday through Friday and alternating Mondays; and supervising patent examiner Frank G. Font can be reached at 703-308-4881.

The USPTO has recently installed server software that enables us to automatically receive facsimile transmissions and route them to the appropriate groups. No special equipment is needed by our customers to use this system other than a regular facsimile machine. Each Technology Center has its own facsimile numbers associated with our server for Official replies to non-final Office actions and for Official replies to final Office actions. In addition, each Technology Center has a Customer Service Center on our server system, and can answer any general application status questions you might have, can provide Examiner information, and answer paper queries.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 or 703-308-7722 for regular communications and 703-872-9319 or 703-308-7722 for After Final communications.

Tech Center 2800 Customer Service is at 703-306-3329 or 703-872-9317. Any inquiry of a general nature or relating to the status of this application or proceeding can also be directed to the receptionist whose telephone number is 703-308-0956.

Phil Natividad
Patent Examiner
psn
March 11, 2003

FRANK G. FONT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800